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REPORT ON THE BLISTER RUST WORK FOR THE TERRITORY
UNDER THE SUPERVISION OF THE MISSOULA OFFICE
FIELD SEASON 1917.

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REPORT ON THE BLISTER RUST WORK FOR THE TERRITORY

UNDER THE SUPERVISION OF THE MISSOULA OFFICE

FIELD SEASON 1917.

The territory covered by the blister rust workers under the supervision of the Missoula Office includes all of the states of Idaho, Montana, and Wyoming; the Black Hills region of South Dakota; and Pend Oreille and Spokane Counties of Washington.

Seven field assistants were employed during the season just closed to scout for the blister rust fungus (Cronartium ribicola) in the district.

PERSONNEL OF BLISTER RUST WORKERS

In charge: Dr. James R. Weir

Field Assistants:

Dr. C. H. Shattuck
Lewis M. Benbow
James A. Hughes
Ferd S. Wolpert
Don M. Langohr
Harold A. Goodding
Vernon Simmons

DIVISION OF DISTRICT AMONG FIELD MEN

The district was apportioned among the men with reference to importance from a blister rust standpoint and to railroad facilities. Men working in territory where five-needle pines were abundant were assigned smaller areas to cover than those scouting in the more arid regions where the aecial host is scarce. The matter of transportation facilities necessarily had to play a part in the division of the district among the men. The districts given the field men will be referred to as sub-districts for convenience in this report.

Sub-district 1

Covered by Dr. C. H. Shattuck whose headquarters was Moscow, Idaho.

The district includes Pen Oreille and Spokane Counties in the State of Washington; Boundary, Bonner, Kootenai, Shoshone, Benewah, Latah, Clearwater, Nez Perce, Lewis, and Washington Counties in Idaho.

(Note. Dr. Shattuck was compelled to resign his position before he had completed his territory in order that he might accept a professorship in the faculty of the University of California. This leaves Boundary County in the extreme northern part of Idaho uncovered.)

Sub-district 2

Field Assistant Lewis M. Benbow, with headquarters at Boise, Idaho, in charge.

This district includes the following Idaho counties: Adams, Washington, Canyon, Boise, Ada, Elmore, Blaine, Custer, Bingham, Bonneville, Bannock, Bear Lake, Power, Franklin, Oneida, Cassia, Minnidoka, Lincoln, Twin Falls, Gooding, and Owyhee.

Mr. Benbow was able to complete his district before leaving for the training camp at American Lake.

Sub-district 3

Field Assistant James A. Hughes, with headquarters at Missoula, Montana, in charge.

This sub-district includes the following Montana counties: Sheridan, Valley, Phillips, Blaine, Hill, Toole, Teton, Flathead, Lincoln, Chouteau, Mineral, Sanders, Missoula, Lewis and Clark, Powell, Granite, and Ravalli.

Sub-district 4.

Field Assistant Ferd S. Wolpert, with headquarters at Boulder, Montana, in charge.

The following Idaho counties are included in this subdistrict: Fremont, Lemhi, Teton, Madison, and Jefferson. The following Montana counties are also included: Beaverhead, Madison, Jefferson, Deer Lodge, and Silver Bow.

Sub-district 5

Field Assistant Don M. Langohr, with headquarters at Bozeman, Montana, in charge.

Sub-district 5 includes the following Montana counties: Gallatin, Park, Sweet Grass, Meagher, Broadwater, Cascade, Fergus, Wheatland, Musselshell, Dawson, Richland, Wibaux, Fallon, Rosebud, Custer, Prairie, Carbon, Stillwater, Big Horn, and Yellowstone.

Sub-district 6

Field Assistant Harold A. Gooding, with headquarters at Sheridan, Wyoming, in charge.

Sub-district 6 includes the Black Hills region in South Dakota and the following counties in Wyoming: Johnson, Sheridan, Campbell, Weston, Crook, Hot Springs, Fremont, Park, Washakie, and Big Horn.

(Note. Mr. Gooding was compelled to resign before completing his territory to accompany his regiment of the National Guard to the training camp. He had not covered Fremont, Park, Washakie, Hot Springs, and Big Horn counties. This territory was assigned to and covered by Don M. Langohr who was in charge of sub-district 5.)

Sub-district 7

Field Assistant Vernon Simmons, with headquarters at Laramie, Wyoming, in charge.

Subdistrict 7 includes the following counties in southern Wyoming: Lincoln, Uinta, Sweetwater, Carbon, Albany, Laramie, Platte, Goshen, Niobrara, Converse, and Natrona.

The accompanying map shows the approximate size and location of each of the sub-districts.

MANNER IN WHICH WORK WAS DONE

Publication Work

First of all, the field men were instructed to arouse interest among the people in the district, in the blister rust work. This was accomplished by newspaper articles, written by the men and published in the various local papers.

In these articles the men endeavored to bring out the importance of the campaign against blister rust by telling the great damage the disease would do should it once gain foothold in the West. A short life history of the fungus causing the disease was usually given.

The men tried to arouse further interest in the work by talking to influential citizens and officials in places where they stopped.

Manner in Which Territory was Scouted

The men made frequent stops along the railroads, stopping at, at least, one point in each county in the entire district. From these points the men scouted the surrounding territory looking for five-needle pines, wild and cultivated Ribes. Frequently, long side trips were made through thickly settled farming areas where Ribes were apt to be planted in abundance, and to stands of timber where five-needle pines could be found. Plantings of Ribes and ornamental pines of the five-needle species were also inspected.

Before starting on these side trips, the men endeavored to find out if there had been any shipments of five-needle pines or Ribes into the territory. Such information was obtained by writing to nurseries doing business in the district, from horticultural inspectors, nurserymen, county agents, and any one

else who might be in touch or interested in such work. The Forestry offices were consulted relative to the location of stands of five-needle pines. With this information at hand, the men proceeded to inspect the blister rust hosts.

All plantations of five-needle pines in the district were carefully gone over. These are few and located in western Montana and Idaho.

Particular emphasis was put on the importance of inspecting new shipments if they were shipped in from infected states. The men were required to keep records of such shipments telling the source of the stock, quantity, present location and owner. These records are on file in the Missoula office. The men did not endeavor to keep records of all Ribes planted in the district, as such a procedure would necessitate a house to house canvass throughout the entire district and such was not possible because of the size of each district. Records were kept of all five-needle pines found.

Examination at Missoula Laboratory

The field men frequently sent specimens of five-needle pines and Ribes to the Laboratory of Forest Pathology for examination.

This material was all carefully examined and found free from infection.

RIBES REPORT FOR DISTRICT

Throughout the entire district, wild Ribes are more or less abundant. The species differ somewhat in different localities. Cultivated Ribes are found in great numbers in the older settled communities, especially in those where irrigation is practiced. In the newer settled and homestead districts, they are rather scarce but some are being planted right along. In towns small Ribes patches are found frequently.

New shipments were few during the 1917 season, probably due to unsettled conditions and the extra effort made to get in increased grain crops.

The men encountered considerable difficulty in getting information relative to new shipments. There are no such records kept in the district and consequently the men were forced to rely on their own efforts for all the information concerning such shipments.

The work on Ribes occupied the greater part of the time in the eastern half of the district, as five-needle pines are almost unheard of in this section. In the western half of the district the opposite was true and the men had to inspect vast areas of five-needle pines as well as look out for Ribes shipments.

Both leaves and stems were examined in the inspection work carried on.

Toward the close of the field season records of shipments of Ribes sent out by the Oregon Nursery Company at Oreno, Oregon, were received and forwarded to the men in the field with instructions to inspect these shipments. These records were compiled and sent out by Mr. Stillinger of Portland, Oregon. The material recorded is supposed to have come in contact with dangerous material. Many of the shipments were received as long as eleven years ago and all that were inspected were found free from disease.

The field men found it impossible to locate many of these shipments for the reason that many of the consignees had moved from the localities to which the shipment was made.

The inspection of all the shipments recorded and sent out by Mr. Stillinger will be an expensive proposition as there are several thousand of them.

Over two hundred of these shipments were inspected by the men and found apparently free from Cronartium ribicola.

THE WORK ON PINES

The men were instructed to make record of every five-needle pine which they found. Imported trees were found to be very scarce. A few trees of Pinus strobus were found in yards, a few in nurseries, and some on forest reserves.

Approximately 100,000 have been transplanted of the latter in Montana alone.

Pinus flexilis (limber pine) is the most general in its distribution of the three in the district. It, however, does not occur in great enough quantity in any locality to make it very valuable.

In the case of blister rust infection in the eastern part of the district, limber pine would play an important part in conveying the disease to the stands of western white pine in the western part of the district. Limber pine is first found near Billings, Montana, and extends westward in varying amounts. In Wyoming it is found close to Sheridan and then on West.

Pinus strobus Linn. (white pine) is not native to this district but there have been several plantations made in western Montana and in Idaho during the past twenty years. It is also found here and there as an ornamental shade tree throughout the district.

THE NURSERY INSPECTION WORK

All nurseries located in the district were carefully inspected and the proprietors warned about the blister rust. They were cautioned not to ship stock from infected areas as this was the best means of getting the disease into the district. There are not many nurseries of importance in the district and consequently most of the nursery stock planted is shipped into the state by outside concerns.

Very few five-needle pines are found in the nurseries in this district as demand for them is small.

In stands of native five-needle pines both young trees and newer growing portions of old trees were inspected for the blister rust.

Following is a brief report on the five-needle pines found in the district.

Five-needle Pines in District

Native species found:

Pinus monticola Douglass
Pinus albiculais Engelm.
Pinus flexilis James.

From a commercial standpoint, western white pine (p. monticola) is the only five-needle pine in the district of any importance. In northern Idaho, Washington, and northwestern Montana it is one of the principal trees of the timber industry.

Pinus albicaulis (white bark pine) extends over a little greater area in the district than P. monticola but is not found in sufficient stands to make it of much commercial importance.

RESUME OF WORK BY SUBDISTRICTS

At the close of the field season each man was requested to make a report of his district. Following is a brief resume of the report handed in by each of the seven field assistants.

Subdistrict 1.

Dr. Shattuck's territory was probably the most important in the entire district from the standpoint of five-needle pines. Throughout his field there are great stands of western white pine (P. monticola) and at the Priest River Experiment Station there are several plantings of white pine (P. strobus). There is also a planting of white pine at the State University arboretum and another near Wallace, Idaho.

Throughout this district there are numerous species of wild Ribes but there have been few plantings of cultivated varieties in the past few years, according to information gained by Dr. Shattuck.

For the greater part of the time, Dr. Shattuck traveled about in his private car and was thereby better enabled to cover his territory in a more effective manner than the other assistants.

With the exception of Boundary County, Idaho, which he had not inspected up to the time of his resignation, he reports his territory apparently free from white pine blister rust.

Subdistrict 2

The district of southern Idaho was scouted by Lewis M. Benbow who maintained his headquarters at Boise, Idaho.

He made special effort to trace the source of all shipments, calling on the state horticultural inspectors and upon nurseries for lists of five-needle pines and Ribes.

He reports several small plantings of white pine and many old plantings of Ribes. Most of the new shipments of Ribes are from within the state or from Utah.

His district includes some stands of western white pine which he covered thoroughly.

The publicity work done by him was commendable if not always diplomatic. The district was really too large for absolutely thorough work, but his reports show that so far as he could ascertain from his inspections, the district is free from blister rust.

Subdistrict 3

Covered by James A. Hughes who made his headquarters at Missoula, Mont.

The district assigned to Mr. Hughes contains practically all of the native stands of western white pine and all of the plantings of true white pine in Montana.

The greater part of the first two months of the season was spent by Mr. Hughes in inspecting the plantings of white pine and the native stands of western white pine. Mr. Hughes received valuable assistance from the members of the Forest Service while on this work.

The latter part of the season was used in inspecting Ribes in towns and on the farms throughout the northern part of Montana. The county agricultural agents gave Mr. Hughes invaluable aid in this branch of the work. Near the close of the season, Mr. Hughes was sent out to inspect shipments which had been sent into the state by the Oregon Nursery Company.

He reports many plantings of Ribes of old origin and two plantings of white pine on private estates, but could find very few new plantings of Ribes of outside origin.

Mr. Hughes, like the other men, gave the work as much publicity as possible.

At the end of the season, he reports no indication of Cronartium ribicola had been found in his territory.

Subdistrict 4

Field Assistant Ferd S. Wolpert was assigned this district and made his headquarters at Boulder, Montana.

He took steps to give the blister rust work sufficient publicity and went even further in that he endeavored to stimulate interest in his work by talking to influential people in his district. He distributed bulletins among them and cautioned them about inspecting their own Ribes another year.

He reports practically no shipments from eastern growers in infected areas of either Ribes or five-needle pines.

He thoroughly covered his territory going over both wild and cultivated Ribes and thoroughly inspecting all stands of five-needle pines.

He has encountered the same difficulty which the other men have had, that is, the impossibility of getting the original source of the reported stock. This is due to the fact that many places are occupied by renters and new owners.

From his observations of this year, he reports that Ribes and five-needle pines in his district are apparently free from infection by Cronartium ribicola.

Subdistrict 5

This ground was given to Don M. Langohr with headquarters at Bozeman, Mont. A large part of this district is newly settled and plantings of any kind are scarce.

In the older settled portions, Mr. Langohr reports many old plantings of Ribes but very few new plantings. The people in this district appear to want rapid growing trees so have not planted evergreens of any kind.

In the towns and in the irrigated farming districts Ribes are abundant.

On the foothills from Billings west and at the high altitudes limber pine is found in varying quantities. Wild Ribes are very abundant throughout the entire district.

Mr. Langohr carried on a publicity campaign in the newspapers, like the rest of the men and endeavored to interest people throughout his district in the blister rust work.

He was unable to find any trace of Cronartium ribicola on either five-needle pines or Ribes in his territory.

Subdistrict 6

This territory was assigned to Mr. Harold A. Gooding with headquarters at Sheridan, Wyoming. He completed the work in the Black Hills region and in about one half of his Wyoming territory, and was then forced to resign to join his regiment.

Most of his Wyoming territory was sparsely populated and plantings of Ribes very scarce. He reports some white pine in a park near Sheridan, Wyoming. The Ribes are old plantings. Several species of wild Ribes also occur in their territory.

The Wyoming counties uncovered by Mr. Gooding were scouted by Don M. Langohr, who was in charge of eastern Montana. Mr. Langohr found numerous plantings of Ribes on the government irrigation projects, mostly several years old. Stands of limber pine were also inspected by him in the mountainous districts.

At Powell, he found and inspected a shipment of Ribes received this spring from Jackson Perkins & Co. of Newark, N.Y.

Both report the parts of the district covered by them apparently free from blister rust infection.

Subdistrict 7

The blister rust work in southern Wyoming was carried on by Mr. Vernon Simmons, an exceptionally enthusiastic worker.

Parts of this district are very arid and vegetation is correspondingly scarce. In such sections very little planting has been done, especially in the line of small fruits and evergreens. The territory close to the mountains and along the different drainage systems where the country is more thickly populated, the conditions for small fruits and evergreens are better, and consequently plantings of currant and gooseberry bushes are more numerous. Mr. Simmons reports that most of the currant and gooseberry bushes in his territory are from Colorado and Utah nurseries although in certain parts of the State the Jewell Nursery Co. of Lake City, Minn., has sold much Ribes. These plantings were inspected and found free from disease.

In the mountainous areas limber pine is more or less abundant. Mr. Simmons reports no plantings, of any consequence, of white pine.

An exceptionally good newspaper campaign regarding blister rust was carried on in southern Wyoming.

Mr. Simmons was unable to discover any trace of blister rust either on pine or Ribes.

VALUE OF INSPECTION WORK

Naturally the most important thing obtained, by the work during the season just closed, is the information that this district is apparently free from white pine blister rust.

The publicity given the work by the men both in newspapers and personal interviews with residents of the district, has stimulated interest in the prevention and eradication work carried on by the government. It is to be hoped that the people have gained no small amount of knowledge concerning the seriousness of the disease, should it once gain foothold in the district.

As a result of this season's work, there is on file in the office a record of every five-needle pine found growing on private places and in nurseries in the district, as well as a record of the sections where five-needle pines occur in natural stands.

There are also records of many plantings of Ribes.

EXTENT OF NURSERY WORK

Within the district there are few large commercial nurseries, and most of the stock found in the district are from outside nurseries. In Montana the only commercial nursery in the state is the State Nursery Company at Helena. A list of the nurseries doing large amounts of shipping into the district is given below.

Salem Nursery Co.	Salem, Ore.
Wholesale Nursery Co.	Portland, Ore.
Jewell Nursery Co.,	Lake City, Minn.
German Nursery Co.,	Beatrice, Neb.
Oregon Nursery Co.,	Oreno, Ore.
Clinton Falls Nursery Co.	Owantona, Minn.
L. L. May Co.	Lakeland, Minn.
Mayfield Nursery Co.	Minneapolis, Minn.
Sherman Nursery Co.,	Charles City, Iowa.
Shenandoah Nursery Co.,	Shenandoah, Iowa.
Stark Bros.	Louisiana, Mo.
Farmer Nursery & Seed Co.	Bismarck, N.D.
Guernsey Nursery Co.	Yankton, S. D.
Northern Colorado Nursery Co.,	Denver, Colo.

There are also many other outside concerns which do a limited business in the State.

Then, there are many small nurserymen located in the district who buy and sell stock from various eastern and western concerns. These men can be classed as nursery stock jobbers and a close watch should be kept on their stock when it comes into the district.

NOTES

The field men report conditions for the spreading of white pine blister rust most favorable throughout the district, both wild and cultivated Ribes being abundant in all sections where five-needle pines occur. Besides this, there is practically an endless chain of Ribes throughout the district, and should the disease once become established it would only be a short time until

infection would cover the entire district unless stringent control measures could be adopted.

The horticultural inspectors should be instructed as to the appearance of the disease and required to make more thorough inspections of five-needle pines and Ribes. They should also be required to keep complete records of such shipments.

A quarantine law, such as the other western states have, should be established in Wyoming, since they have no local inspectors. A shipment of Ribes from the state of New York, where blister rust is very serious, was found at Powell, Wyoming. This was free from infection but might have been the source of infection for the entire district, as Ribes in the vicinity of this planting are plentiful and scattering stands of Pinus flexilis are found not very far away.

If the district is to be thoroughly gone over a large number of field men will be needed another year and a house-to-house canvass of the entire district will have to be made.

This will be especially true if all of the shipments recorded on cards sent out by Mr. Stillinger are to be inspected. These records were received just as the field season was closing this year, and in many sections the leaves of Ribes had turned and were falling so the work could not be completed.

If this house-to-house canvass is made another year, it will be possible to have a record of all Ribes in the district.

It is very plausible to believe that much more nursery stock is to be planted in the near future. As the country settles up, the people are going to want their individual patches of small fruits which will include Ribes. Evergreens have been planted to a greater extent in the past few years and will be planted more and more in the future. If a close watch is not kept, some infected pine and Ribes may get into the district.



The following tables give a record of the five-needle pines found in the district. The tables give the name of the owner, post office address, the source of the trees, the year secured, and the status of health in respect to white pine blister rust. Although a thorough inspection of all telial hosts was made whenever found, records were not kept in every case.

Five-needle Pines Reported

Species	Present	Location	Owner	Number	Source	Date: Status
monticola	Cour d'Alene Nat'l. Forest	United States	many	From seed	1909: Good health	
do	Near Seeley Lake, Mont.	"	"	"	"	
do	Thrupout mts. of northern Ida. & western Mont.	U.S.	"	"	"	
strobilus	Haugen, Mont. Sec. 20, T. 19, R. 30	United States	15,000	Savenac Nursery	1913 "	
"	" " " " "	"	38,000	"	1913 "	
"	do.	"	47,000	"	1913 "	
"	do.	"	25,000	"	1914 "	
"	Haugen, Mont. Sec. 28, T. 19, R. 30	"	6,600	"	1917 "	
"	Sylvanite R. S. - S. 9, T. 34 N. R. 33W.	"	840	Mich. Agr. College, Lansing.	1911 "	
& "	do.	"	1,000	do.	1912 "	
"	Priest River	"	Many	"	"	
"	Spokane, Wash.	Riverside Nur. Co.	1	D. Hill & Co. ?	1913 "	
"	Ft. Benton, Mont.	A. E. McLeish	2	Lake City Nur., Lake City Minn.	1917 "	
"	Cheyenne, Wyo.	Carey Land and Cattle Co.	6	German Nur. & Seed Co.	1916 "	
"	Sheridan, Wyo.	(Glen Park), City	10	Jewell Nur. Co. Lake City Minn.	1917 "	
"	Weiser, Ida.	Fred Brockman	2	Payette Nursery	1901 "	
"	Payette, Ida.	J. R. Anderson	12	" ?	" ?	
"	Rupert, Ida.	Wm. Henscheid	18	Gardner Nurseries, Osege, Neb.	1912 "	
"	NW of Nampa, Ida.	Old H. C. Monce Place	30	Shenandoah, Ia.	1906 "	
"	Arboretum, Moscow, Ida.	State of Idaho	Many	"	"	
flexilis	Hills around Thermopolis, Wyo.	?	Many	Native	"	
"	Owl Creek Mts., Wyo.	State	Many	"	"	
"	Joliet, Mont.	?	Many	"	"	
"	Hills in Yellowstone Co., Mont.	?	Many	"	"	
"	College campus, Bozeman, Mont.	State	10	?	? "	
"	Mts. in western part of subdist. 5	?	Many	?	"	
"	Insk, Wyo.	Insk Land Co.	6	Jewell Nur. Co. Lake City, Minn.	1917 "	
"	Broadview School Yd., Broadville, Mont.	School board	12	" " "	1917 Dead	
"	Billings, Mont.	W. H. McCormack	4	?	Good	

Location:	Owner	Source	Date:	Source	State	Status of health
<u>Wyoming</u>						
Cody . .	.Geo. Taylor ?	1915	?		Good
Lovall	John Everett	?	1908	?		"
Basin	E.C.Hoover	?	1915	?		"
"	Art Rigley	Jewell Nur. Co.	1917	Lake City, Minn.		"
"	Dan Rogers	" " "	1917	" " "		"
"	Josh Ellis	" " "	1917	" " "		"
"	J. V. Gould	- - -	1915	- - -		"
Warland	J. W. Templin	Stoddard Nursery	1916	Kansas		"
"	L. Fliehmman	Shenandoah Nur.Co.	1917	Shenandoah, Ia.		"
"	R. E. Clark	- - -	1910	- - -		"
"	C. H. Marsh	Stoddard Nur. Co.	1916		Kansas	"
Powell	J. Mudget	Northern Nur. Co.	1917	Denver	Colorado	"
"	C.C.Double	" " "	1917	"	"	"
"	J. H. Knights		1916-1917	?		"
"	C. D. Barnett	German Nursery Co.	1916	Beatrice, Neb.		"
"	Jas. J. Callaghan	Jackson Perkins Co.	1917	Newark, N.Y.		"
Garland	L. Weary	- - -	1917	- - -		"
Ranchester	J. Oleson		1912	Billings, Mont.		"
"	T. W. Short	?	1910		South Dakota	"
Clearmont	C. O. Lang		1907	Iowa		"
Sheridan	H. A. Louchs	(Jewell Nursery Co. (L.L.May & Co.	. . 1914	Lake City, Minn. Lakeland, Minn.		"
Mannville	C. J. Patten, bought thru Hastings Industrial Co.		1917	Chicago, Ill.		"
Keeline. . .	J. S. Sullivan	Jewell Nursery Co.	1917	Lake City, Minn.		"
Keeline) Mannville) Lusk)	Dry farms	" " "	1917	" " "		"

<u>Location:</u>	<u>Owner</u>	<u>Source</u>	<u>Date:</u>	<u>Source</u>	<u>Status of health</u>
Encampment	Henry Fleur	Burton Seed Co.	?	Denver, Colo.	good
"	C.R. Fairmon	" " "	1916	" "	"
"	J. Blackhall	Wells Nursery Co.		Bismarck, N.D.	"
Jackson's Hole	?	Mayfield Nursery Co.	1910	Minneapolis, Minn.	"
Dody	Dr. Howe		1916	?	"
Chayenne	Allen Chantry	Henry Field Seed Co.	1917	Shanandoah, Ia.	"
<u>Montana</u>					
Gold Butte	L. Berthelote	Jewell Nursery Co.	1912	Lake City, Minn.	"
Glasgow	S. R. Walker		1912	Minnesota	"
Froid	Froid Nursery Co.		1914?	Fairbault, Minn.	"
Plentywood	Baker Riba		1912?	Minnesota	"
Columbia Falls	Mrs. Irene Kennedy	Salem Nursery	1904	Salem, Ore.	"
Lewiston	Mrs. Chas. Littlefield	Jewell Nursery Co.	1917	Lake City, Minn.	"
"	Fred Arndt	Strand Nursery Co.	1917	Taylor Falls, Minn.	"
Sidney	Louis Selter	Clinton Falls Nursery Co.	1916-17	Owantana, Minn.	"
Glendive	Lewis Cole	Jewell Nursery Co.	1915-16	Lake City, Minn.	"
"	Isaac Montan	" " "	1912	" " "	"
"	W. F. Ullman	, German Nursery Co.	1917	Beatrice, Neb.	"
"	John Flynn	- - -	1917	- - -	"
"	Fred Cummings	- - -	1915	Wisconsin	"
Columbus	G. W. Davis	Stark Bro.	1917	Louisiana, Mo..	"
"	H. J. Calhoun	" "	1917	" "	"
"	E. E. Lightfoot	Farmer Nur. & Seed Co.	1917	Bismarck, N.D.	"
"	A. W. Bebb		1917	Oregon	"
"	L. Wilkinson	- - -	1917	- - -	"
Bozeman	Tracy Floral Co.	Jewell Nursery Co.	1917	Lake City, Minn.	"
"	City of Bozeman	" " "	1916	" " "	"

<u>Location:</u>	<u>Owner</u>	<u>: Source</u>	<u>:Date:</u>	<u>Source</u>	Status of health
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Idaho

Weiser	John S. McCree	Salem Nursery	1908	Salem, Ore.	Good
"	W. T. Wilson	No. Yakama Nursery	1911) 1914)	North Yakama	"
"	G. W. Fonner	Wholesale Nursery	1910	Portland, Ore.	"
Mesa	J. P. Gray		1912	Shenandoah, Ia.	"
New Meadows	Mrs. G.S. Mitchell	McGregor Nursery	1916	La Grande, Ore.	"



